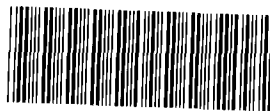


# memorandum

Rocky Flats Office



000020079

DATE: SEP 14 1992

REPLY TO: ERD:BKT:10318

ATTN OF:

SUBJECT: Data Analysis for the Baseline Risk Assessment at RFP Operable Unit No. 1

TO: J.M. Kersh, Associate General Manager  
Environmental and Waste Management  
EG&G Rocky Flats, Inc.

Meetings were held with EPA and CDH regarding data analysis for the human health risk assessment for OU 1 on August 28 and September 4, 1992. At the first meeting, EG&G presented an averaging method to determine exposure concentrations that, in effect, diluted contaminant concentrations over the entire OU 1 area which is arbitrary in size and shape. The averaging method presented at the second meeting involved dividing OU 1 into an east and west area and computing average contaminant concentrations for each half. This method also results in the dilution of contaminant concentrations over arbitrary areas.

Section VII.D.1.b, Attachment II of the RFP IAG states that "both present and future potential risk at each site and OU shall be considered, and both current and maximum reasonable use scenarios shall be considered, including evaluation of risk at the source". Neither of the averaging methods presented to EPA consider evaluation of risk at the source. Thus, we are currently on a path of potential noncompliance with the IAG.

We agree that averaging methods are appropriate for both the on-site commercial/industrial and ecological researcher scenarios since individuals under these scenarios will have an equal probability of encountering the various contamination sources at OU 1. However, the on-site residential scenario differs in that a residence, along with the residents, will be stationary and exposure is most likely to result from contaminants present at the location of the residence. Thus, evaluation of risk at the source will be necessary for the on-site residential scenario as well as the environmental evaluation.

We request that EG&G perform this evaluation for on-site residential land use and include it in the baseline risk assessment portion of the OU 1 Phase I RFI/RI Report. We would define this as the reasonable maximum exposure (RME) for this scenario. For the on-site residential scenario, dilution of the contamination should be done only if both of the following conditions are met: 1) the area of contamination is significantly smaller than a reasonable residential lot size and 2) it would make sense to the average individual (i.e., the public). Since evaluation of risk at the source is clearly stated as a requirement in the IAG, DOE RFO does not interpret this request as an increase in scope.

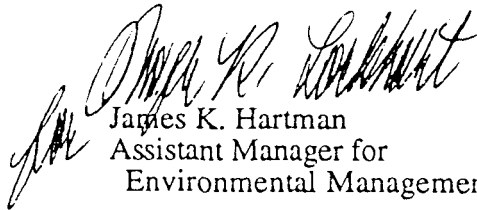
With regard to the averaging methods presented to date, we believe that it is reasonable to state average risk to the individual as a measure of population risk. However, we request that the averaging be based on area weighting methods for surficial soils and sediments and volumetric weighting methods for subsurface soils and groundwater. For the on-site residential scenario, presentation of both RME and average risk is required.

In order to make both the average and RME exposures meaningful, we request that the linkage between transport and fate and contaminant of concern exposure be clearly presented

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in the baseline risk assessment portion of the RFI/RI Report for OU 1. It is DOE RFO's interpretation that this request is not an increase in scope.

Questions or concerns regarding the requests presented in this memorandum should be directed to either Bruce Thatcher at extension 3532 or Scott Grace at extension 7199.

  
James K. Hartman  
Assistant Manager for  
Environmental Management

cc:

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